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(54) Title: METHOD FOR MANUFACTURING BEADS CONTAINING EXOGENOUS SOY PROTEIN

(57) Abstract: The present invention provides protein-containing particles with a high eating quality characterised by having a high content of exogenous protein and optionally of phospholipids and/or of fibres. The present invention also provides a method for manufacturing protein-containing particles with a high eating quality characterised by having a high content of exogenous proteins and optionally of phospholipids and of fibres. The present invention further provides soy protein-containing beads, methods for the manufacture of same and bread comprising soy protein-containing beads and methods for the manufacture of same.

INTERNATIONAL SEARCH REPORT

Internat Application No
PCT/IB 03/00672

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A23J3/16 A23J3/26 A21D2/36 A21D2/26 A23L1/305

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A23J A21D A23L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, FSTA, BIOSIS, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	TSEN C C ET AL: "Extruded soy products from whole and dehulled soybeans cooked at various temperatures for bread and cookie fortifications." CEREAL FOODS WORLD 1975 DEP. OF GRAIN SCI. & IND., KANSAS STATE UNIV., MANHATTAN, KANSAS 66506, USA, vol. 20, no. 9, pages 413-418, XP008023984 cited in the application the whole document	1,4,19, 20,38-40
X	GB 1 522 439 A (SPECIAL FOOD CORP) 23 August 1978 (1978-08-23) cited in the application claims 1-26 --- -/-	1,4,19, 20,38,39

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *A* document member of the same patent family

Date of the actual completion of the international search

31 October 2003

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INTERNATIONAL SEARCH REPORT

Internat Application No

PCT/IB 03/00672

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2001/019734 A1 (GILBERTSON DENNIS B ET AL) 6 September 2001 (2001-09-06) page 2, paragraphs 25,26 page 3, paragraph 32 page 4, paragraph 51	1,4,19, 20,38,39
X	US 2001/055642 A1 (COHEN DEBORAH W) 27 December 2001 (2001-12-27) page 1, paragraph 9	1,19,38
A	page 2, paragraph 16; claims 1-29	20-25, 39-82
X	EP 1 129 626 A (PROTEIN TECH INT) 5 September 2001 (2001-09-05) page 5, paragraphs 31,32	75,76, 81,82
A	WO 00 30663 A (HOIE LARS HENRIK ;NUTRI PHARMA AS (NO)) 2 June 2000 (2000-06-02) cited in the application page 33; claims 1-58 page 38	19-25, 38-82
A	SA SOUZA DE E ET AL: "EIWEISS- UND BALLASTSTOFFANREICHERUNG BEI ARGENTINISCHEM WEIZENMEHL" GETREIDE MEHL UND BROT, BOCHUM, DE, vol. 35, no. 6, 1981, pages 150-153, XP008019007 ISSN: 0367-4177 the whole document.	19-25, 38-82
A	ZIMMERMANN R ET AL: "UEBER FUNKTIONELLE EIGENSCHAFTEN VON SONNENBLUMENPROTEINEN IN WEIZENTEIG 4. MITT VERGLEICHENDE UNTERSUCHUNGEN ZUR WIRKUNG EINER VORQUELLUNG VON SONNENBLUMEN- UND SOJA-PROTEINISOLATEN BEI VERSCHIEDENEN PH-WERTEN" DIE NAHRUNG, VCH VERLAGSGESELLSCHAFT, WEINHEIM, XX, vol. 28, no. 9, 1984, pages 975-981, XP008019004 ISSN: 0027-769X the whole document	48-50

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 03/00672

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 1-18 (partial)
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 1-18 (partial)

Present claims 1-80 relate to a large number of possible compounds. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a part of the products claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the products related to soy protein containing particles or beads, as mentioned in claims 19-25 and 38-82 and throughout the description, e.g. p.1 1.4, p.3 1.20-p.5 1.5 etc.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Internal Application No
PCT/15 03/00672

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Internat Application No
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